

CHAPTER 1. OPERATIONS SPECIFICATIONS

SECTION 6. PART H--HELICOPTER TERMINAL INSTRUMENT PROCEDURES AND AIRPORT AUTHORIZATIONS AND LIMITATIONS

211. GENERAL. Part H is issued to each operator who conducts Federal Aviation Regulations (FAR) Part 135 instrument flight rules (IFR) operations with helicopters. It is not issued to FAR Part 135 operators who conduct only fixed-wing airplane operations. Part H is not usually issued to FAR Part 135 on-demand helicopter operators who are restricted to visual flight rules (VFR)-only operations. In rare situations, operations specifications paragraph H120 is issued to FAR Part 135 VFR-only operators who are authorized to conduct commuter operations with helicopters.

213. H101--TERMINAL INSTRUMENT PROCEDURES. H101 is issued to all helicopter operators who conduct any flight operations under IFR. IFR operators whose operations are restricted to the 50 United States (U.S.) are only issued H101a(1), (2), and (3). The whole paragraph is issued to operators who are authorized to conduct any IFR helicopter operation outside of the U.S. Federal Aviation Administration (FAA) Order 8260.31, "Foreign Terminal Instrument Procedures," provides direction and guidance on acceptance of foreign terminal instrument procedures. Additional information concerning terminal instrument procedures is in volume 4, chapter 2.

215. H102--BASIC INSTRUMENT APPROACH PROCEDURE AUTHORIZATIONS--ALL AIRPORTS. H102 specifies the types of instrument approaches the helicopter operator is authorized to conduct and prohibits the use of other types of instrument approaches. Only the types of instrument approaches checked on the operations specifications worksheet for C52 will be printed in paragraph H102. If precision approaches are not authorized, H102b will not be printed. Before authorizing a type of instrument approach procedure, the principal operations inspector (POI) must ensure that the operator provides appropriate training for the types of approaches to be authorized. See volume 4, chapter 2, for information on required training for various types of approaches.

217. H103--IFR LANDING MINIMUMS OTHER THAN AIRBORNE RADAR AND CATEGORIES II AND III APPROACHES--ALL AIRPORTS. H103 specifies the lowest minimums that can be used for Category I (CAT I) nonprecision approaches, precision approaches, and circling maneuvers. It prescribes conditions that must be met in order to conduct contact approaches. It also provides special limitations and provisions for instrument approach procedures at foreign airports. If an operator is not authorized to conduct precision approaches, the language of H103b will be automatically changed to prohibit the use of precision approaches. If the operator is not authorized to conduct operations outside the U.S., H103e will not be issued. See volume 4, chapter 2, for information on required training for circling maneuvers and contact approaches.

219. H104--HELICOPTER EN ROUTE DESCENT AREAS (HEDA). (o/s 13j) H104 is issued to all operators authorized to conduct IFR helicopter operations using helicopter en route descent procedures within specified areas of operation. It is not issued to helicopter operators who are not authorized to use helicopter en route descent procedures. Figure 3.1.6.1. illustrates one method of authorizing use of a particular HEDA.

221. H105--ALTERNATE AIRPORT IFR WEATHER MINIMUMS. H105 is issued to all FAR Part 135 operators who conduct IFR operations with helicopters.

223. H106--IFR TAKEOFF MINIMUMS, HELICOPTER OPERATIONS--ALL AIRPORTS. (for H106c: o/s 13g; for H106d: o/s 13h) H106 is issued to all operators who conduct IFR helicopter operations under FAR Part 135. If an operator is not authorized to conduct operations outside of the U.S., H106d(3) will not be printed for issuance. If an operator is not authorized to use lower-than-standard takeoff minimums, H106d and e will not be printed for issuance. See volume 4, chapter 2, for information concerning requirements an operator must meet before

being authorized to use lower-than-standard takeoff minimums.

225. H107--SPECIAL RESTRICTIONS FOR FOREIGN TERMINAL INSTRUMENT PROCEDURES. (o/s 5g) H107 is issued only when the POI (or the region responsible for the geographic area where a foreign airport is located) finds it necessary to place special restrictions on a foreign terminal instrument procedure. These special restrictions to foreign terminal instrument procedures are applicable only to U.S. air carriers. The purpose of these special restrictions is to establish an equivalency between the foreign terminal instrument procedure and ICAO (PANS-OPS) or U.S. (TERPS) criteria. FAA Order 8260.31 provides direction and guidance on how to place restrictions on foreign instrument procedures. This order also contains a list of foreign terminal instrument procedures that are currently restricted. If an operator conducts flights to any airport listed in this order, the POI must issue H107 with the name of the airport, airport identifier, procedure identification, and special restrictions listed in the appropriate template.

227. H108-- CATEGORY II (CAT II) INSTRUMENT APPROACH AND LANDING OPERATIONS. (In the operations specifications checklist, item o/s 7f will automatically select CAT II in the operations specifications.) CAT II operations are evaluated in accordance with volume 4, chapter 2, section 5, and are approved by issuance of paragraph H108. All initial CAT II operations for each operator and each aircraft used by that operator require regional office and AFS-400 review and concurrence before the issuance of H108. This concurrence is also required before the POI may amend H108 to include an aircraft make/model/series (m/m/s) new to the operator. All reductions in CAT II operating minimums for each operator and aircraft require regional office concurrence.

A. CAT II Approach and Landing Minimums and Authorized Aircraft. Each aircraft m/m/s used in CAT II operations must be listed in subparagraph H108a. The lowest decision height (DH) and lowest runway visual range (RVR) authorized for each aircraft must also be specified. Figure 3.1.6.2. illustrates the method for authorizing each aircraft in H108a.

B. Required CAT II Airborne Equipment. The flight instruments, radio navigation equipment, other airborne systems required by the applicable FAR, and the FAA-approved rotorcraft flight manual (RFM) for the conduct of CAT II operations must be installed and operational. The additional airborne equipment listed or referenced in figure 3.1.6.3. is also required and must be operational for CAT II operations. There

are two acceptable methods of demonstrating that an aircraft is airworthy for CAT II operations: a "type design approval" obtained by a manufacturer, or an "operational demonstration" conducted by an operator.

(1) *Type Design Approval.* The RFM (or supplement), for aircraft that have CAT II type design approval, contains a statement to the effect that the airborne systems have demonstrated the reliability and redundancy necessary for CAT II operations, in accordance with the current guidance, Advisory Circular (AC) 120-29, "Criteria for Approving Category I and Category II Landing Minima for FAR 121 Operations," as amended. These approved RFM's and supplements also specify that certain equipment is required for airworthiness approval of the various kinds of CAT II operations. Some of the approved RFM's also indicate that acceptable CAT II performance was demonstrated both with and without (w/wo) certain equipment (for example w/wo autothrottles). AC 120-29 also specifies that certain types of equipment are required for operational approval of the various kinds of CAT II operations (manual/autopilot). Therefore, both the RFM and AC 120-29 must be considered in determining the additional equipment that must be specified in H108b. (See figure 3.1.6.3.)

(a) *Explicitly Required Equipment.* Equipment that is explicitly required by the aircraft certification regulations (FAR Parts 27 and 29), the operating regulations (FAR Parts 91 and 135) and/or the RFM should not be specified in H108b. The standard text of H108b requires this equipment to be functional.

(b) *Non-Explicitly Required Equipment.* When the RFM indicates acceptable performance both w/wo certain items of equipment not explicitly required by AC 120-29, the POI must determine how the operator intends to conduct CAT II operations and train flightcrews with those items of equipment. If the operator proposes to conduct operations both w/wo certain items of equipment (such as autothrottle, autopilot), flightcrews must be trained for both situations, and the item of equipment does not need to be listed in H108b. If the operator proposes to conduct operations only when those items of equipment are functional, then those items of equipment must be specified in H108b. (See figure 3.1.6.3.)

(2) *Operational Demonstration by the Certificate Holder.*

(a) *Non-Type Design Equipment.* The operational demonstration method of ensuring the airworthiness of CAT II equipment is only appropriate for aircraft and equipment that do not have CAT II type design approval. The certificate holder must con-

duct the operational demonstration in accordance with AC 120-29. The additional equipment that must be specified in H108b is determined by considering the equipment required by the rotorcraft certification regulations (FAR Parts 27 and 29), operating regulations (FAR Parts 91 and 135), AC 120-29, and the equipment configuration used during the operational demonstration of airworthiness conducted by the operator. Equipment required by the rotorcraft certification regulations and operating regulations should not be listed in H108b. Equipment required by AC 120-29 and any other items of equipment essential to the CAT II equipment configuration used in the operational demonstration of airworthiness must be listed as additional equipment in H108b. (See figure 3.1.6.3.)

(b) Manual/Autopilot Operations. Manual and/or autopilot operations must be specified for each item of equipment listed in H108b. The POI accomplishes this by placing an "X" in the appropriate column adjacent to each item of equipment. If an item of equipment is applicable to both manual and autopilot, X's must be placed in both columns. If an item of equipment is applicable to one kind of CAT II operation, but not the other, an X must be placed in the applicable column, with the other column left blank. If only one kind of CAT II operation is authorized, then the X's must be placed in the appropriate "Manual" or "Autopilot" column. See figure 3.1.6.3. for examples of how the items of equipment should be specified for the kind of CAT II operation.

C. Required RVR Reporting Equipment. These requirements are automatically issued in subparagraph H108c of the operations specifications.

D. Pilot Qualifications. These requirements are automatically issued in subparagraph H108d of the operations specifications.

E. Operating Limitations. These requirements are automatically issued in subparagraph H108e of the operations specifications.

F. Missed Approach Requirements. These requirements are automatically issued in subparagraph H108f of the operations specifications.

G. Authorized Landing Areas. Airports and runways for which an operator is authorized to conduct CAT II instrument approach and landing operations are specified by H108g. If the airport and runways are approved for CAT II operations in FAR Part 97, they should not be listed in H108g unless the POI determines that there is a need to specify a special limitation for an operator at a particular airport. If the CAT II approach procedure is published in the National Ocean Service (NOS) "Instrument Approach Proce-

dures" flight information publication as a CAT II procedure, it is approved in FAR Part 97. Airports and runways not listed in FAR Part 97, but approved for operator use, must be specified in H108g.

229. H109--CATEGORY III (CAT III) INSTRUMENT APPROACH AND LANDING OPERATIONS. (In the operations specifications checklist, item o/s 7g will automatically select CAT III in the operations specifications.) CAT III operations are evaluated in accordance with AC 120-28, "Criteria for Approval of Category III Landing Weather Minima" (as amended), and this handbook (see volume 4, chapter 2, section 6). POI's approve CAT III operations by issuing paragraph H109. Before a POI may issue or amend paragraph H109, the POI must coordinate with and obtain written concurrence from the appropriate regional office and AFS-400. That written concurrence must contain each operation and each m/m/s of aircraft used by that operator.

A. CAT III Approach and Landing Minimums. The decision height/alert height (DH/AH) and lowest RVR authorized for each m/m/s of aircraft type must be specified in subparagraph H109a for the kinds of CAT III operations authorized. CAT IIIa fail-passive operations must use a 50-foot DH. Most CAT IIIa/IIIb fail-operational operations use a 50- or 100-foot DH. Use of a DH in conjunction with an AH for these operations is inappropriate. Sometimes, however, a DH is required for fail-operational CAT III operations (see AC 120-28). In these situations, a 50-foot DH or less should be specified. Use of an AH in these operations is inappropriate. Figure 3.1.6.4. illustrates the method for authorizing each aircraft in H109a.

B. Required CAT III Airborne Equipment. The equipment required to conduct CAT III operations for each aircraft m/m/s is specified by H109b and is established in accordance with the applicable FAR, the RFM, and AC 120-28 (as amended). The only acceptable method of demonstrating the airworthiness of an aircraft for CAT III operations is through type design approval obtained by a manufacturer. The RFM (or supplement), for aircraft that have CAT III type design approval, contains a statement to the effect that the airborne systems have demonstrated the reliability and redundancy necessary for CAT III operations, in accordance with AC 120-28. These RFM's also specify that certain equipment is required for airworthiness approval of the various kinds of CAT III operations. Some of the RFM's also indicate that acceptable CAT III performance was demonstrated both w/wo certain equipment (for example w/wo auto-throttles). AC 120-28 also specifies that certain types of equipment are required for operational approval of the various kinds of CAT III operation. Therefore, the POI must consider both the RFM and

volume 4, chapter 2, section 6, of this handbook when determining the additional equipment to be specified in H109b. (See figure 3.1.6.5.)

(1) *Additional Equipment.* Equipment that is explicitly required by the rotorcraft certification regulations (FAR Parts 27 and 29), the operating regulations (FAR Parts 91 and 135), and the RFM should not be specified in H109b. The standard text of H109b requires this equipment to be functional. Therefore, the additional equipment that must be specified in H109b is determined by cross-checking the types of equipment required by AC 120-28 for the kind(s) of CAT III operation(s) proposed against the equipment required by the regulations and the RFM. The additional equipment to be specified in H109b is not only that explicitly required by the regulations and the RFM, but also that required by AC 120-28 and the direction of AFS-400.

(2) *Special Provisions.* When the RFM indicates acceptable performance both w/wo certain items of equipment (which are not explicitly required by AC 120-28 or AFS-400), the POI shall specify in H109b those items of equipment that the operator intends to use. If the operator proposes to conduct operations only when those w/wo items of equipment are functional, then those items of equipment must be specified in H109b.

C. Kinds of CAT III Operations. Fail-passive and/or fail-operational must be specified for each item of equipment listed in H109b for each aircraft type. POI's accomplish this by placing an "X" in the appropriate column adjacent to each item of equipment. If an item of equipment is applicable to more than one kind of operation, X's must be placed in appropriate columns. If an item of equipment is applicable to one kind of CAT III operation, but not the others, an X must be placed in the applicable column. The other columns for that item of equipment shall be left blank. If only one kind of CAT III operation is authorized (for example, CAT IIIa fail-operational), then the X's must be placed in the CAT IIIa fail-operational column. See figure 3.1.6.5. for an example of how the items of equipment should be specified for the various kinds of CAT III operations.

D. Pilot Qualifications. Minimum qualifications for rotorcraft pilots are automatically issued in subparagraph H109d of the operations specifications.

E. Operating Limitations. Limitations for rotorcraft operations are automatically issued in subparagraph H109e of the operations specifications.

F. Missed Approach Requirements. These requirements are automatically issued in subparagraph H109f of the operations specifications.

G. Authorized CAT III Airports and Runways. All airports and runways to which an operator is authorized to conduct instrument approach and landing operations are specified in subparagraph H109g. If the POI and AFS-400 determine that there is a need to specify special limitations for the operator at a particular airport (for example, SEA 16R), then those special limitations shall be specified in H109g. All CAT III airport and runway approvals are approved in accordance with FAA Order 8400.8, "Procedures for Approval of Facilities for FAR Part 121 and Part 135 CAT III Operations"; AC 120-28; and this handbook. Certain airports and runways (SEA, MSP, CVG, PIT) require AFS-400 evaluation and approval for each aircraft type. POI's must contact AFS-400 for further direction and guidance concerning the approval of CAT III airports and runways. Figure 3.1.6.6. illustrates how POI's should complete subparagraph H109g.

231. H110--FLIGHT CONTROL GUIDANCE SYSTEMS FOR AUTOMATIC LANDING OPERATIONS OTHER THAN CATEGORIES II AND III. (o/s 12d and 13n)

A. H110 authorizes an operator to use a flight control guidance system with automatic landing capabilities to touchdown. Before issuing H110, the POI must determine the following:

- The RFM permits use of the flight control guidance system (autoland system) to touchdown
- Training on the use of the flight control guidance system and autoland procedures is provided to flight crewmembers
- The operator continually maintains flight control guidance and autoland systems in accordance with an approved maintenance program for autoland operations

B. The helicopters (make/model) and the flight control guidance systems (manufacturer/model) authorized for this type of operation, must be listed in subparagraph H110a. Figure 3.1.6.7. is an example of how the helicopter and flight control guidance systems should be listed.

233. H111--MANUALLY FLOWN FLIGHT CONTROL GUIDANCE SYSTEM CERTIFIED FOR LANDING OPERATIONS OTHER THAN CATEGORIES II AND III. (o/s 12e and 13o) (TBD)

235. H112--INSTRUMENT APPROACH OPERATIONS USING AN AREA NAVIGATION-SYSTEM. (o/s 12c and 13p) (TBD)

237. H113--SPECIAL TERMINAL AREA IFR OPERATIONS--AUTHORIZATIONS, LIMITATIONS, AND PROVISIONS. (o/s 5c or 5d)

H-113 authorizes an operator to conduct the following types of special operations:

- Nonscheduled passenger and cargo and scheduled all-cargo terminal area IFR operations outside of controlled airspace
- Scheduled passenger terminal area IFR operations outside of controlled airspace and at locations without an operating air traffic control tower
- Use of special (non-FAR Part 97) instrument approach or departure procedures

A. Nonscheduled Operations. (o/s 5c or 5d) Before authorizing nonscheduled terminal area IFR operations outside of controlled airspace, the POI must determine that the operator has a method or procedure for obtaining and disseminating necessary operational information. This operational information must include the following:

- The airport is served by an authorized instrument approach procedure (and departure procedure when applicable)
- Applicable charts for crewmember use
- Operational weather data from an approved source for control of flight movements and crewmember use
- Status of airport services and facilities at the time of the operation
- Suitable means for pilots to obtain traffic advisories

B. Scheduled Operations. (o/s 5c) Before authorizing scheduled terminal area IFR helicopter operations outside of controlled airspace, or at airports without an operating air traffic control tower, the POI must obtain and list the following information in H113. A template for listing this information is on the operations specifications worksheet.

- Names of airports
- Source of weather information to be used by flightcrews (see volume 3, paragraphs 789 and 791)
- Sources of traffic and airport advisories

C. Sources of Traffic and Airport Advisories. Certificate holders may be authorized to use any two-way radio source of air traffic advisory information listed in the Airman's Information Manual (for operations in U.S. airspace) or equivalent aeronautical

information publications (for foreign operations). These sources include common traffic advisory frequencies, unicom, multicom, and flight service stations. If an air traffic advisory source is also suitable for determining the status of airport services and facilities, it is the only source that needs to be listed in paragraph C64. When airport services and facilities information is on a different frequency than the traffic advisory frequency, both sources should be listed in paragraph C64. In those cases where two sources are listed at the same airport, inspectors must ensure that the operator's manuals have procedures that require pilots to continuously monitor and use the traffic advisory frequency when operating within ten nautical miles of the airport. The procedures should require communication concerning airport services and facilities to be completed while more than 10 miles from the airport. At some airports, no public use frequencies may be available. In those cases, a certificate holder must arrange for radio communication of essential information including surveillance of local or transient aircraft operations by ground personnel. Ground personnel who operate a company radio for airport status and traffic advisory must be able to view airspace around the airport.

D. Special Terminal Instrument Approach or Departure Procedures. (TBD)

239. H114--SPECIAL AIRPORT AUTHORIZATION, PROVISIONS, AND LIMITATIONS. (o/s 13a) (TBD)

241. H120--AIRPORTS AUTHORIZED FOR SCHEDULED OPERATIONS.

A. Under SFAR 38-2 paragraph 3, the operations specifications must prescribe the authorizations and limitations for each type of operation. All regular, provisional, and refueling airports shall be listed in the operations specifications of all operators conducting scheduled operations. This includes helicopter commuter operations. The operator may provide a list of these airports which can be incorporated into the operations specifications by reference to the list in H120.

B. If the airports are to be listed in H120, the operations specifications worksheet and computer provide a template for the Information that must be listed. This information includes the following:

- Airport name
- Three-letter identifier of the airport, if available
- Aircraft authorized to use the airport (Normally, the operator's aircraft can be listed in

the seven spaces provided at the top of the “Authorized Aircraft” column.)

- A notation that the airport is a regular airport (R) for the type of aircraft authorized

C. Figure 3.1.6.8. is an example of how this information can be formatted:

NOTE: If an airport is designated as provisional, the regular airport for which it serves as a provisional airport must be annotated. (Except in unique situations, an airport should not be designated as a provisional airport if it is located more than 30 statute miles from the regular airport.)

D. If the operator provides a list of airports to be incorporated into H120, this list must provide the

same type of information previously discussed. This list must be annotated with the effective date of the listing. The list does not need to be physically attached to H120, but it must be maintained on file in the certificate-holding district office (CHDO) with copies of the operator’s operations specifications. If a list is provided by the operator, no entries should be made on the operations specifications worksheet or in the computer. If no entry is made, the computer will automatically print “See Attached Listing” below the text of H120.

E. H120 specifies that the operator must maintain a list of alternate airports that can be used. The list of alternates may be integrated into the list provided by the operator, if desired. If a separate list of alternate airports is maintained by the operator, it is not necessary for the FAA to maintain a copy. The POI, however, should occasionally inspect the list of alternates to determine airport and aircraft compatibility.

242.-260. RESERVED.

FIGURE 3.1.6.1.

Authorized Helicopter En Route Descent Areas	Lowest Authorized Altitude (LAA)	Remarks, Limitations, and Conditions
Eugene Island Block 191	400 Ft.	Increase LAA to 700 Ft. with radar altimeter or mapping radar inoperative

FIGURE 3.1.6.2.

AIRCRAFT TYPE MAKE/MODEL/SERIES	DH NOT LESS THAN	LOWEST AUTHORIZED RVR
BH-222	100 Ft.	1200
SK-76	150 Ft.	1600

FIGURE 3.1.6.3.
EXAMPLE OF CAT II ITEMS OF EQUIPMENT (TYPE DESIGN)

AIRCRAFT MAKE/MODEL/SERIES	KIND OF CAT II OPERATION	
ADDITIONAL EQUIPMENT AND SPECIAL PROVISIONS	MANUAL	AUTOPILOT
NOTE: THE POI MUST LIST ALL REQUIRED EQUIPMENT NOT SPECIFIED IN THE FAR, IN THE TYPE DESIGN APPROVAL, AND IN AC 120-29.		

NOTE: THE FOLLOWING EQUIPMENT IS REQUIRED BY THE RFM AND SHOULD NOT BE LISTED IN 108b

- One Autopilot
- Two EADI's
- Two IRU's in NAV mode
- Two sources of electrical power

FIGURE 3.1.6.4.

1. CATEGORY 111a FAIL-PASSIVE OPERATIONS		
AIRCRAFT TYPE MAKE/MODEL/SERIES	DH/AH	LOWEST AUTHORIZED RVR
BH-222	50 DH	700
2. CATEGORY IIIa FAIL-OPERATIONAL OPERATIONS		
AIRCRAFT TYPE MAKE/MODEL/SERIES	DH/AH	LOWEST AUTHORIZED RVR
SK-76	100 AH	700
3. CATEGORY IIIb FAIL-OPERATIONAL OPERATIONS		
AIRCRAFT TYPE MAKE/MODEL/SERIES	DH/AH	LOWEST AUTHORIZED RVR
SK-76	100 AH	300

FIGURE 3.1.6.5.
EXAMPLE OF CAT III ITEMS OF EQUIPMENT

AIRCRAFT MAKE/MODEL/SERIES	KIND OF CAT III OPERATION			
	CAT IIIa		CAT IIIb	
ADDITIONAL EQUIPMENT AND SPECIAL PROVISIONS	FAIL PAS	FAIL OP	RVR 600	BELOW 600
NOTE: THE POI MUST LIST ALL REQUIRED EQUIPMENT NOT SPECIFIED IN THE FAR, IN THE TYPE DESIGN APPROVAL, IN THE RFM, AND IN AC 120-29.				

FIGURE 3.1.6.6.

AIRPORT	RUNWAYS	SPECIAL LIMITATIONS
William B. Hartsfield Atlanta, GA (ATL)	8L, 8R	

FIGURE 3.1.6.7.

AIRCRAFT TYPE (MAKE/MODEL)	FLIGHT CONTROL GUIDANCE SYSTEM (MANUFACTURER/MODEL)
S-76	Astronautics P/N 131810
Bell 222	Sperry SHZ-222

FIGURE 3.1.6.8.

AIRPORT NAME	IDENT	AIRCRAFT AUTHORIZED					P. FOR IDENT
		SK61	BH222				
Albany County	ALB	R	R				
John F. Kennedy Intl.	JFK	R	R				
La Guardia	LGA	R	R				

[PAGES 3-114 THROUGH 3-122 RESERVED]

